APPENDIX II:

Air Quality Information

EPA United States Environmental Protection Agency

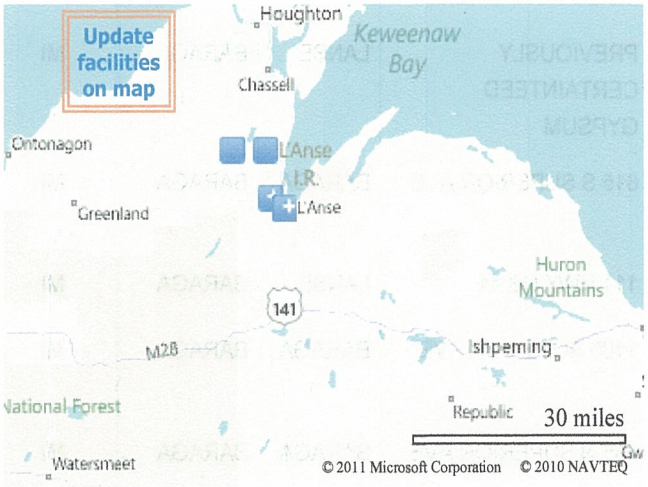
Envirofacts

Search Results

AFS

List of Facilities Reporting to AFS in Envirofacts

Information on air releases is contained in the Aerometric Information Retrieval System (AIRS), a computer-based repository for information about air pollution in the United States. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. In AIRS, these sources are known as facilities, and the part of AIRS associated with data about sources is called the AIRS Facility Subsystem, or AFS. The information in AFS is used by the states to prepare State Implementation Plans, to track the compliance status of point sources with various regulatory programs, and to report air emissions estimates for pollutants regulated under the Clean Air Act.



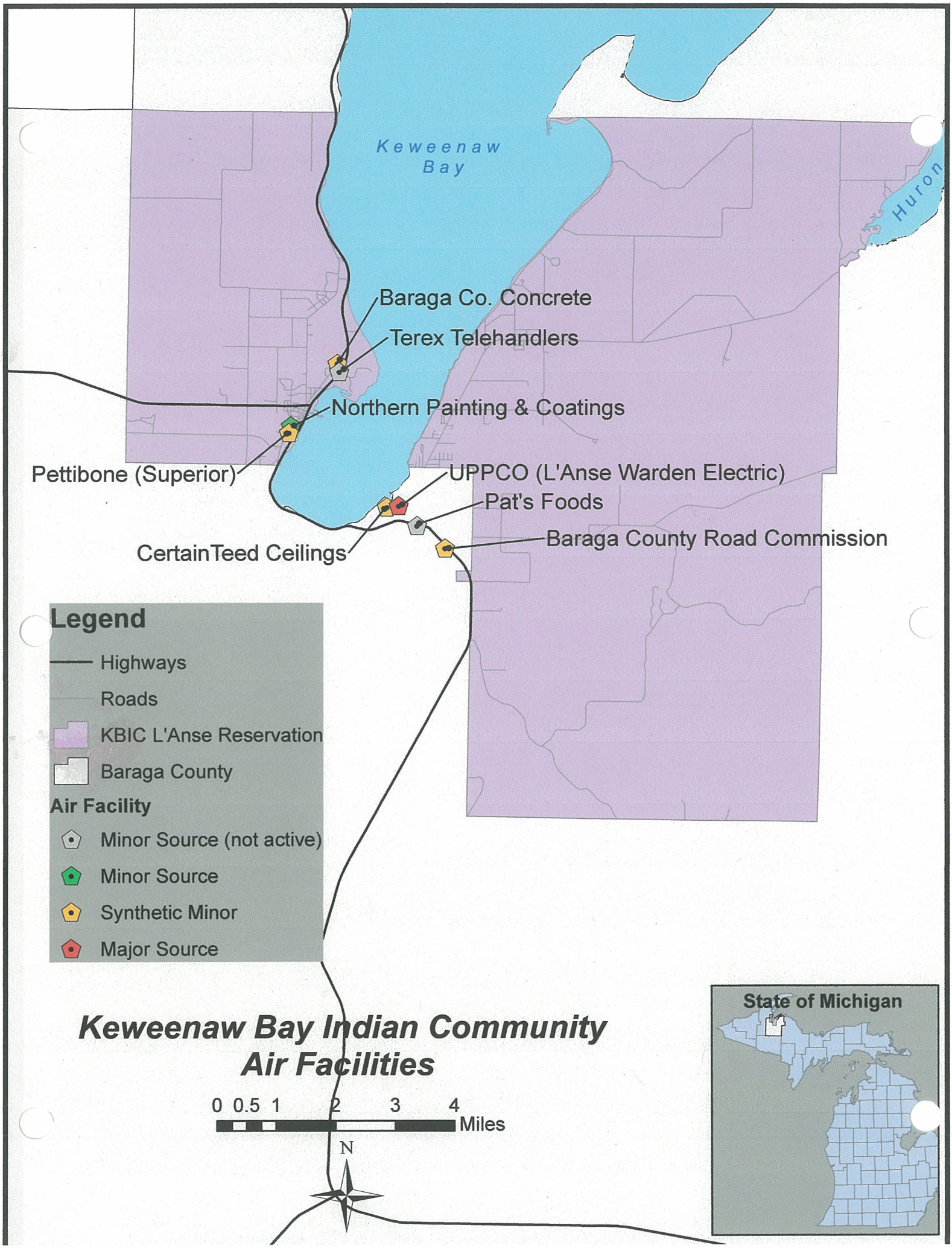
Search Results for:

Baraga County, Michigan

AFS Links

- Overview
- Search
- Model
- Law
- AFS Search User Guide
- Contact Us
- AFS Home

Report an Error


Keweenaw Bay
Huron
Baraga Co. Concrete
Terex Telehandlers
Northern Painting & Coatings
Pettibone (Superior)
UPPCO (L'Anse Warden Electric)
Pat's Foods
Baraga County Road Commission
CertainTeed Ceilings
Legend
Highways
Roads
KBIC L'Anse Reservation
Baraga County
Air Facility
Minor Source (not active)
Minor Source
Synthetic Minor
Major Source
Keweenaw Bay Indian Community
Air Facilities
0 0.5 1 2 3 4
Miles
N
State of Michigan

FINAL REPORT

The Measurement of Ambient Particulate Aerosols Within the Keweenaw Bay Indian Community

February 2000 to February 2001

02 July 2002

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Introduction

Numerous scientific studies have linked particulate matter with adverse health effects in humans. Potential health problems related to excessive particulate matter exposure include premature death, aggravated asthma, chronic bronchitis, decreased long function, and work/school absences. Those individuals who are most susceptible to the effects of particulate matter include children, the elderly and those with pre-existing respiratory problems. A number of past health effects studies have suggested that adverse health effects were associated with particulate levels well-below the current National Ambient Air Quality Standard for particulate matter as set in The Clean Air Act, last amended in 1990. As a result of such findings, in 1997 the U.S. Environmental Protection Agency proposed new particulate matter standards that included a fine particulate matter standard (particulate matter less than 2.5 microns in aerodynamic diameter, or PM2.5). A 1999 U.S. Federal Court ruling blocked the implementation of these proposed PM2.5 standards (annual arithmetic mean of 15 μg/m3 and 24-hour mean of 65 μg/m3) based upon concerns related to the validity of using the PM2.5 cutoff for use in establishing these health based standards. Despite this court action, states and local communities began to monitor PM2.5 due to its potential for resulting in adverse human health effects. Recently, the courts upheld the PM2.5 rules and found in favor of the USEPA.

Particulate matter consists of a mixture of solid particles and liquid droplets that are found in the ambient atmosphere. Particulate matter has both natural and anthropogenic sources, with the chemical and physical composition of particulate matter varying considerably from source to source. Course particles (those greater than 2.5 micrometers in diameter) come from a variety of sources, which include windblown dust, materials handling and grinding operations. Fine particles (those less than 2.5 micrometers in diameter) are typically associated with fuel combustion (motor vehicles and power generation), as well as from other industrial processes (metals processing and incineration). While course particulate matter typically deposits close to its source, fine particulate matter can be transported over long distances (greater than 100 km) and be deposited far from its source.

With respect to anthropogenic sources, the extent to which a given community is impacted by these sources (either local or distant emissions) is often dependent upon the local geography and climatological meteorological conditions. These conditions impact both the local atmospheric stability (and thus trapping or dispersion of pollutants) and the general wind patterns that are responsible for pollutant transport into/out of a region and/or community. In some instances, coastal communities may be particularly susceptible to high levels of anthropogenic pollutants due to enhanced stable atmospheric conditions resulting from their proximity to large, cold bodies of water. Such stability can often result in a trapping of pollutants near the surface for extended periods of time. For this reason, the University of Michigan Air Quality Laboratory (UMAQL), in conjunction with the Keweenaw Bay Indian Community (KBIC), sought to conduct a one-year investigation of the ambient fine-particulate levels within communities located adjacent to the Keweenaw Bay of Michigan's Upper Peninsula. The original intent of the study was to establish a community-based monitoring program that looked at the PM2.5 levels in a residential community within the KBIC. It was felt that the combined effects of wood-burning (for home heating), local industries and the unique geography of the area might

platform was approximately ten feet above the ground. As will be discussed latter in this report, the most elevated levels of both PM2.5 mass and mercury were observed with atmospheric transport from the west and northwest, thus it is our opinion that the proximity of the sampling site to the campground did not adversely impact the study results.

The sampling protocol used in this study has been described in detail within the Quality Assurance Project Plan submitted in conjunction with this project. In brief, clean sampling techniques developed by the University of Michigan Air Quality Laboratory were used in all phases of this project (sampling preparation, deployment, retrieval and analysis). Samples were collected using an "every sixth day" sampling schedule that coincides with the "every sixth day" sampling schedule used by the U.S. EPA for monitoring networks associated with total suspended particulates, lead, PM10, PM2.5 and volatile organic compounds.

Each particulate sample was collected for a period of twenty-four hours (0800 local time Day 1 to 0800 local time Day 2), using filter-based media (quartz filters for mercury and Teflon filters for mass and trace elements). Following sample collection, all samples are shipped to the University of Michigan Air Quality Laboratory in Ann Arbor, Michigan for analysis within a Class 100 clean laboratory. Field blanks were collected with the first sample day of each month, so as to characterize the sample handling and analysis procedures used in the study. All samples were collected by the staff of the KBIC Environmental Science Department, which received training from University of Michigan Air Quality Laboratory personnel prior to the start of the sampling program. Based upon the results of our analysis of the field blank filters collected during the one-year sampling period, a number of the trace metal species analyzed were blank-corrected prior to presentation.

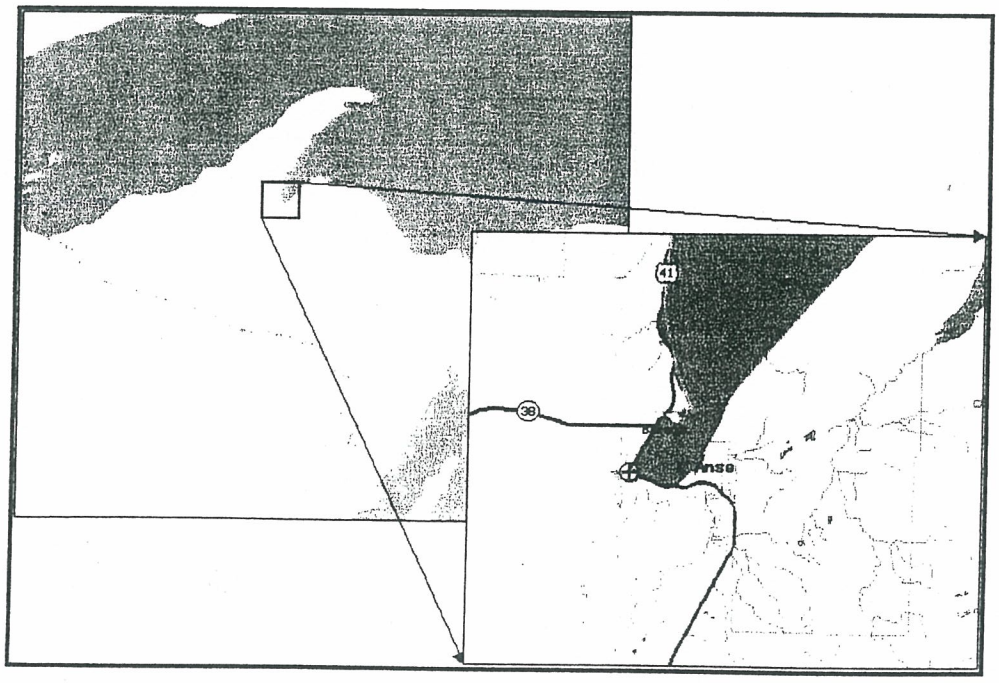


Figure 1. Location of Keweenaw Bay Indian Community PM2.5 Sampling Site

Overall, the ambient PM2.5 mercury concentrations observed at the Baraga site during the period were quite low compared to other data collected by the UMAQL at sites located within the Great Lakes. In part, these relatively low PM2.5 mercury concentrations observed at the Baraga site are likely due to the relative distance of the site from major mercury emission sources in the Lower Great Lakes region (Figures 3a and 3b). In general, the primary anthropogenic sources of mercury are: fossil fuel combustion (industrial, electric utilities and home heating) and medical and municipal waste incineration, Chlor-alkali production, cement manufacturing and lamp/mercury-switch breakage.

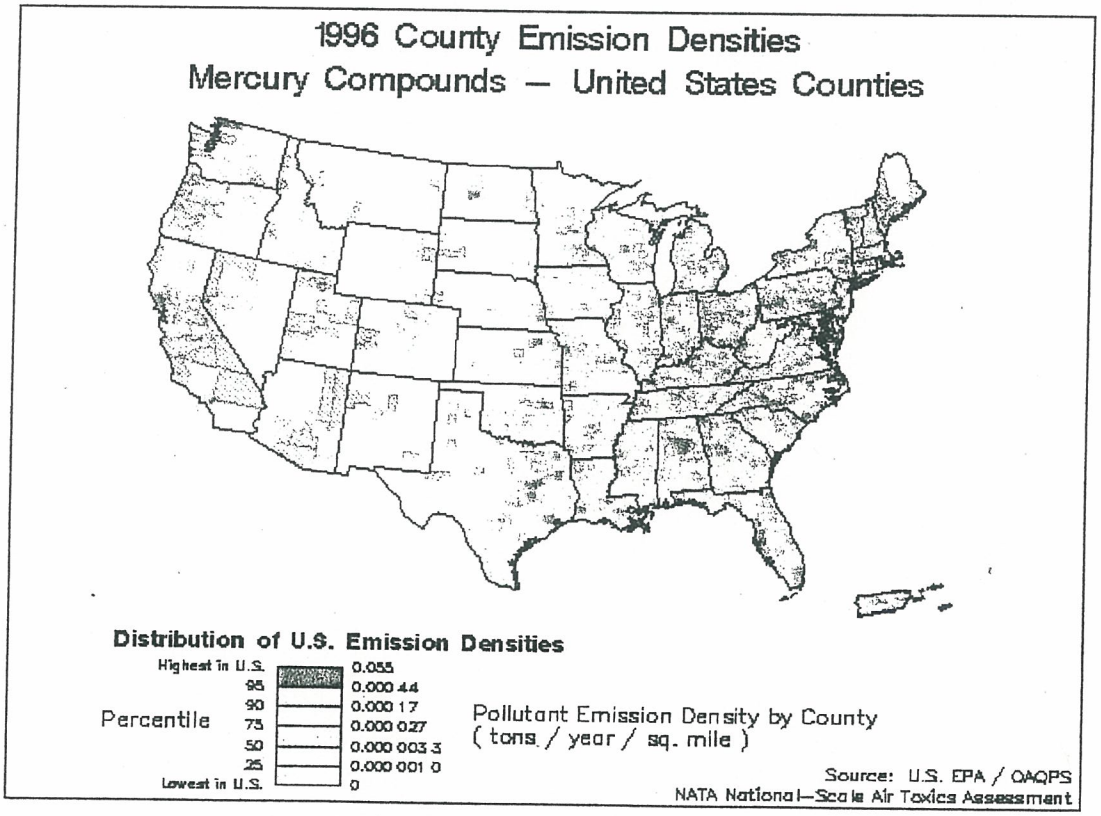


Figure 3a. 1996 USEPA County Emissions Densities for Mercury Compounds for the United States.

Ambient PM2.5 Mass Concentrations

The results for the measurement of "every sixth day" PM2.5 mass concentrations (units: micrograms per cubic meter) at the Baraga site are presented in Figure 4. The average PM2.5 mass concentration for the yearlong study period was 6.4 $\mu g/m^3$. It can be seen that the PM2.5 mass concentrations observed at the site were well below the health-based National Ambient Air Quality Standards (NAAQS) for PM2.5 of 15 $\mu g/m^3$ (annual mean) and 65 $\mu g/m^3$ (24-hour mean). Figure 4 does indicate a slight trend toward relatively higher PM2.5 mass concentrations during the Summer and Autumn seasons (see also Table 2). This seasonal trend was not unexpected and there are two likely explanations for this observation. First, during the summer and autumn seasons, a greater percentage of the atmospheric transport across the area is from the south than in the Winter season. Given the relatively large number of anthropogenic sources located in the southern Great Lakes Region, it is not surprising the atmospheric transport from the south would carry relatively polluted air from the industrialized southern Great Lakes northward into the Upper Great Lakes. Second, seasonal differences in humidity across the region are also important. During the warmer seasons of the year (Summer and Autumn), the atmosphere is able to hold more water vapor than during the colder seasons of the year (Winter and Spring). The increased humidity levels during the warm seasons mean that more water vapor available is available to adsorb onto hygroscopic particle surfaces (e.g., sulfate), allowing these particles to grow in size and mass. As a result, PM2.5 mass concentrations would be expected to be elevated during the warmer, more humid months due to the adsorption of water vapor onto the ambient particles.

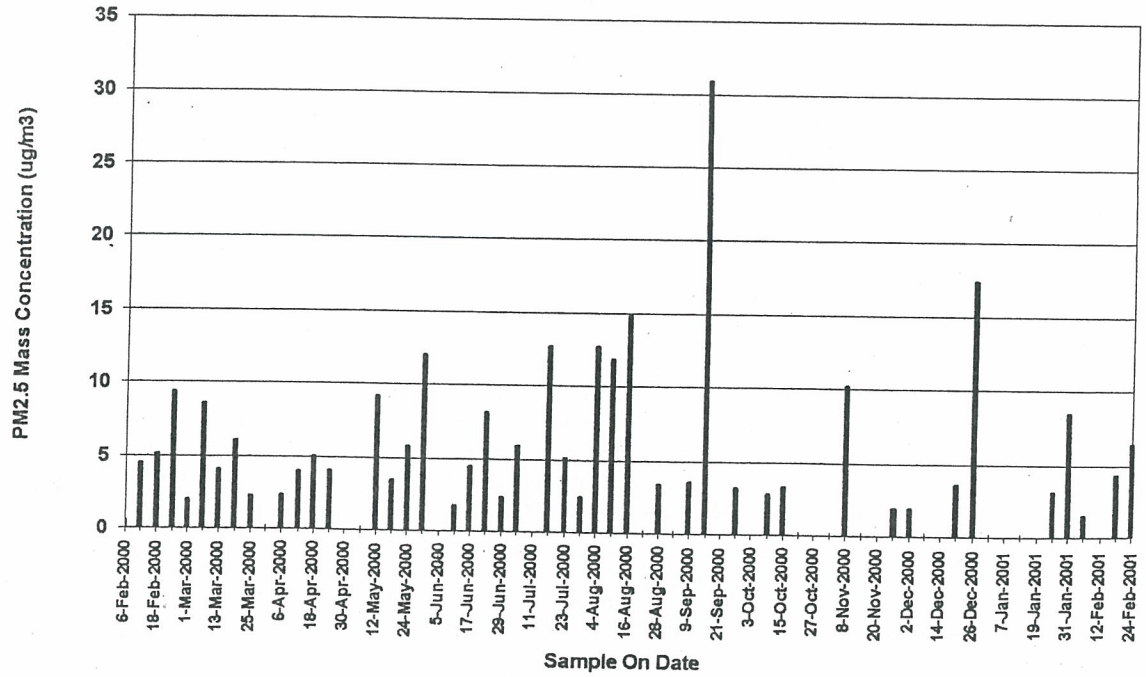


Figure 4. Figure 2. Every Sixth Day PM2.5 Mass Concentration, Keweenaw Bay Indian Community, Michigan.

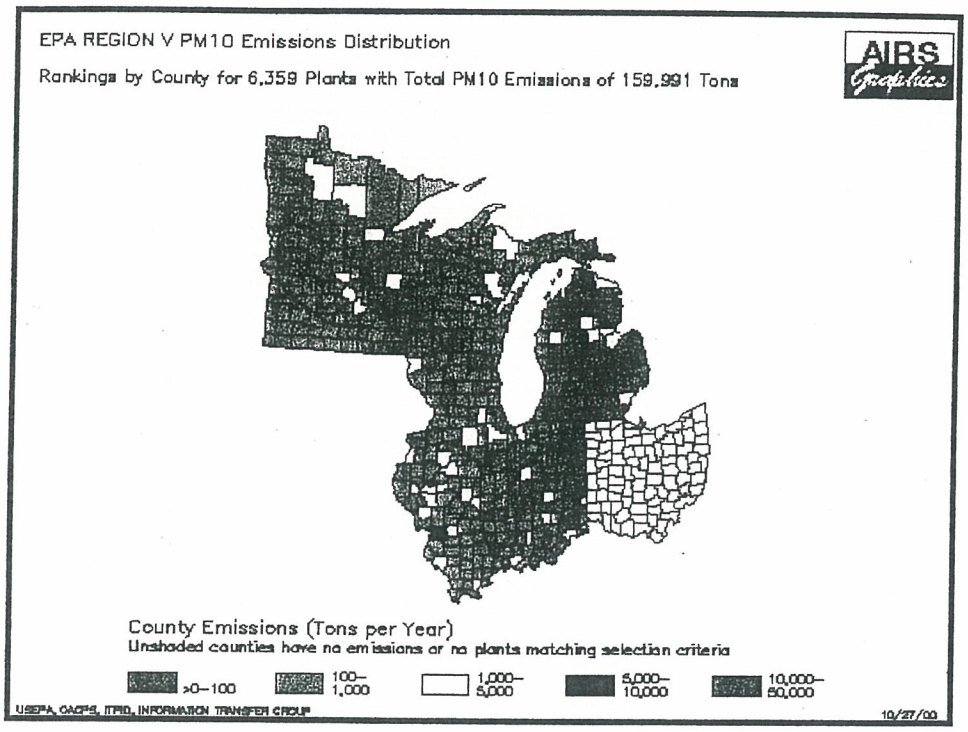


Figure 5a. PM10 Emissions Distribution for USEPA Region 5 by County.

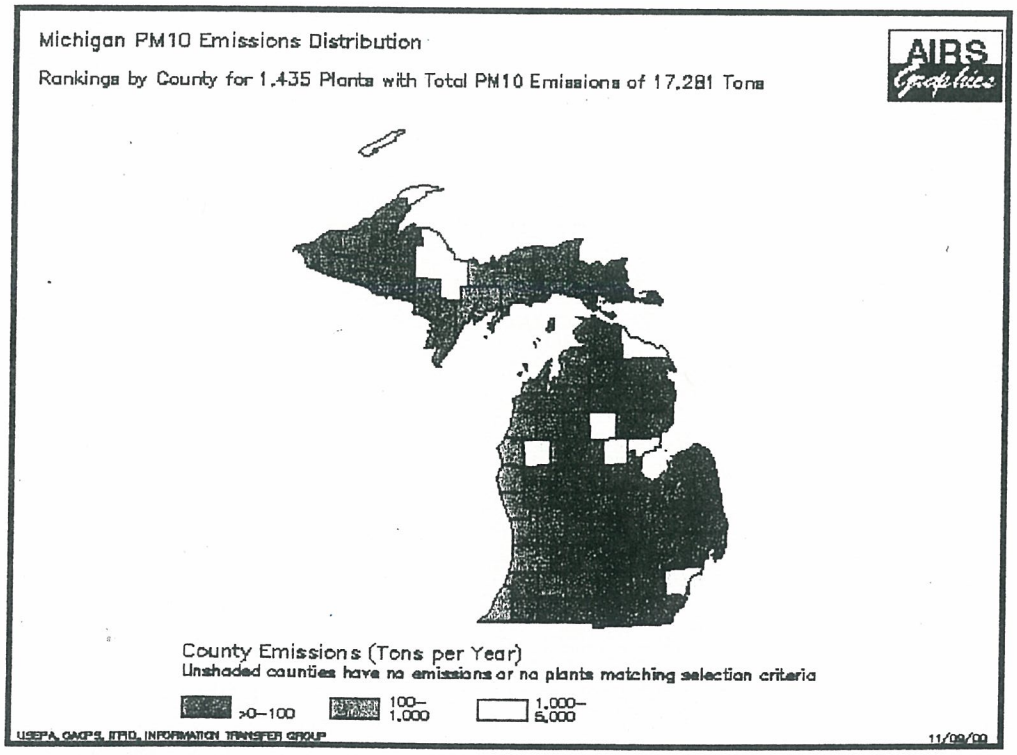


Figure5b. PM10 Emissions Distribution for the State of Michigan by County.

In an attempt to see if trends in the observed PM2.5 mercury and mass concentrations at the Baraga site could be linked to air mass transport pathway (and thus differing source regions), a "back-trajectory" analysis was performed for each of the 24-hour periods during which ambient samples were collected. This analysis was performed using the National Oceanic and Atmospheric Administration's Hybrid Single Particle Lagrangian Integrated Trajectory (HY-SPLIT) model and meteorological data from the National Center for Environmental Prediction's EDAS meteorological modeling system (Draxler and Hess 1997). For a given 24-hour sample period, the HY-SPLIT model started with a "parcel" of air that was located 500 meters above the ground at 0000 GMT (7PM Eastern Standard/8PM Eastern Daylight) at the latitude and longitude of the measurement site. This represented the approximate midpoint of the sample period. The HY-SPLIT model then used the three-dimensional wind field provided by the EDAS meteorological modeling system to track the parcel backwards for 36 hours to determine the atmospheric transport pathway history of that parcel. The results of the "back-trajectory" analysis performed for samples arriving at the Baraga site are presented in Figure 7.

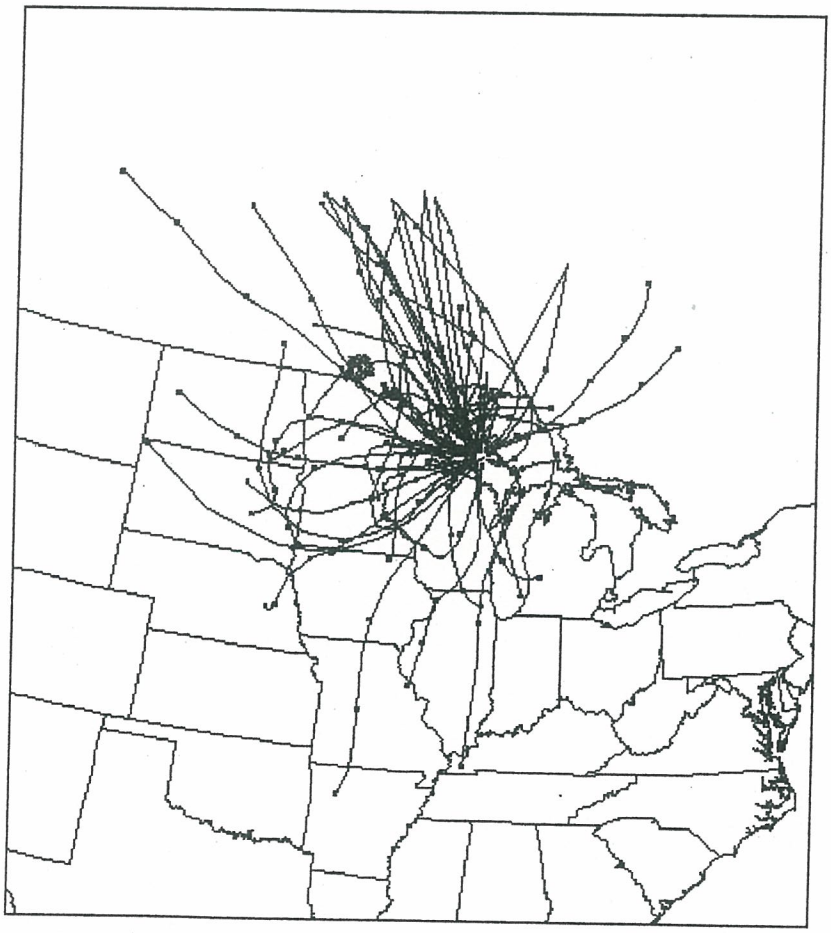


Figure 7. Thirty-six hour back-trajectories for parcels arriving in Baraga, MI at 8PM on days for which samples were collected during the period of February 2000 through February 2001.

For PM2.5 mass, elevated concentrations were observed with atmospheric transport from a variety of directions, but predominantly from the northwest. One such example is shown in Figure 9, which presents the surface meteorological conditions at 8PM on 15 September 2000, the mid-point of the 24-hour period for which the highest PM2.5 mass concentration during the one-year study period was observed (30.9 $\mu g/m^3$). During this 24-hour period, high-pressure across the eastern Great Lakes was gradually moving to the south. This resulted in an atmospheric flow pattern that would have carried the airmass impacting the Baraga site over southern Ontario and northern Minnesota. Both of these areas are known for relatively high emissions of particulate matter associated with metals processing and coal-fired utilities. Locally, there are a number of significant sources of particulate matter across the western Upper Peninsula that could have further contributed to the elevated PM2.5 concentration, as well.

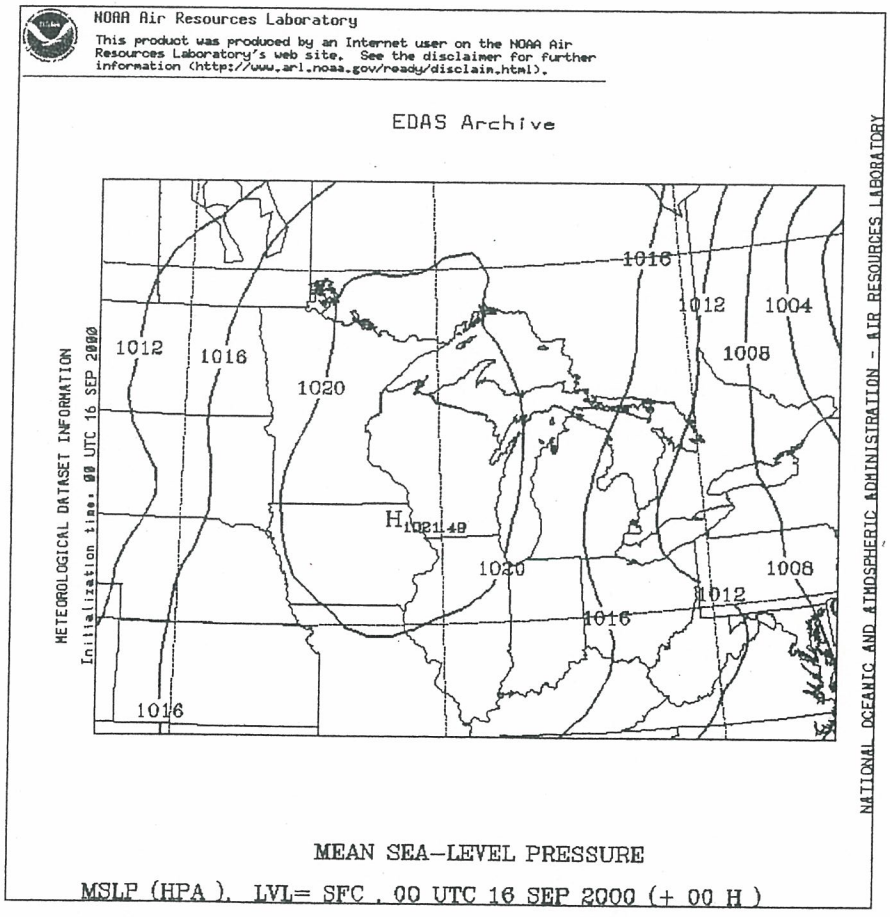


Figure 8. Surface meteorological conditions at 8PM on 15 September 2000.

Potential Contributions to PM2.5 Mercury Concentrations

Correlation coefficients (r) were determined for PM2.5 mercury, PM2.5 mass and speciated PM2.5 mass concentrations and are presented in Table 3 (below). In this table, r-values of greater than ± 0.23 are considered to be statistically significant at the 95 percent confidence level. One of the most striking features of this analysis is that while a positive correlation exists between the PM2.5 mercury and mass concentrations, the correlation was not statistically significant at the 95 percent confidence level. This suggests that the most significant sources contributing to PM2.5 mercury and PM2.5 are likely different. This would be consistent with the differences in predominant source areas suggested by the atmospheric transport analysis. Table 3 indicates that for the period studied, PM2.5 mercury was most highly correlated with lead, arsenic and strontium. These correlations were statistically significant at the 95 percent confidence level. Additional elements that had statistically significant correlations with mercury were calcium, vanadium and magnesium. These results suggest that the observed levels of ambient PM2.5 mercury at the Baraga site were likely associated with impacts from fossil-fuel combustion sources (lead, arsenic and vanadium) and metals processing (lead, arsenic and manganese) (CEPA WGAQOG 1999).

Olmez and Gordon (1985) found that by consideration of the ratio of La/Ce, it is possible to distinguish between types of fossil fuel sources contributing to a given sample. Coals used in the United States typically contain levels of lanthanum and cerium resulting in a ratio near 0.5, which is similar to that observed within the Earth's crust. As a result, emissions from U.S. coal-fired facilities typically result in La/Ce ratios near 0.5. In contrast, oil-fired utilities and oil-refineries are characterized by La/Ce ratios great than 1.0. For the period studied, the La/Ce ratios for the five-highest observed PM2.5 mercury concentrations ranged from 0.67 to 0.99 (average 0.83) suggesting that there was at least some fossil-fuel contribution from oil based sources (from either home heating, oil-based power generation and/or oil refining). The significant correlation between mercury and vanadium at the Baraga site supports this interpretation given that vanadium is typically associated with oil-based sources.

Based upon statistics obtained from the Michigan Public Service Commission (for the period November 1999 to October 2000), regional average fuel mixtures used in electric power generation are dominated by coal (71.3 percent), with only 0.8 percent of fuel attributed to oil. Local power generation, by the Upper Peninsula Power Company, is also predominantly fueled by coal (for the period October 2000 to September 2001) [Source: http://www.uppco.wpsr.com/]. Given these facts, our results suggest that the most elevated levels of mercury observed at the Baraga site were in part impacted by regional, oil-based sources of mercury. This hypothesis is supported by the fact that the atmospheric transport associated with the highest PM2.5 mercury concentrations observed during the study period was primarily from the west and southwest, where a number of oil-fueled utility stations and oil-refineries are located (in Wisconsin, Minnesota and Illinois).

Given the apparent importance of potential contributions from metals processing in the Upper Great Lakes, it is somewhat surprising that a better correlation was not found between PM2.5 mercury and copper, given the traditional abundance of the latter in the Upper Great

TABLE A2 (Continued)

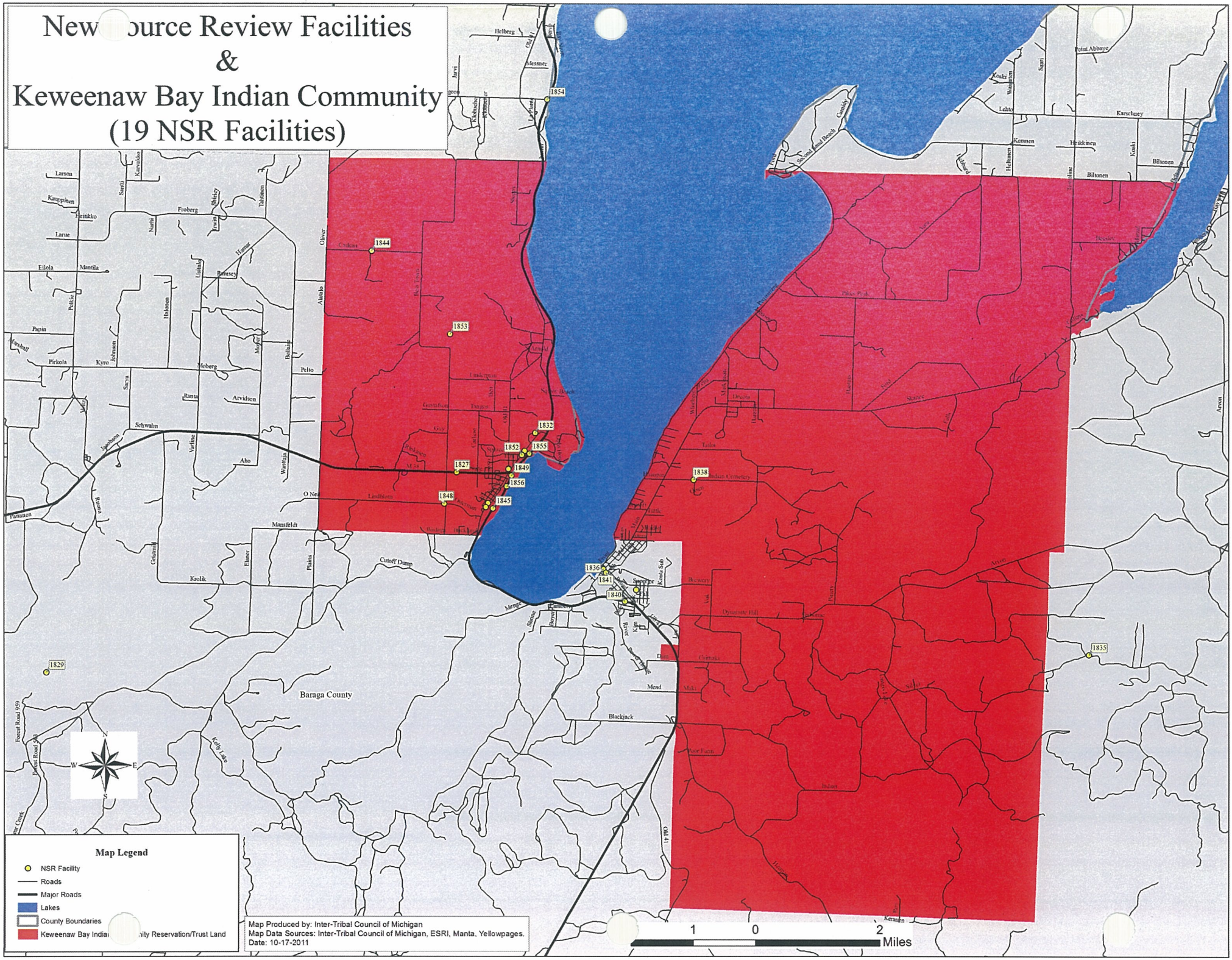
SAMPLE ID	DATE ON	Hg(p)	I2.5 Ma	Sr	Cd	Ba	La	Ce	Pb	Mg	Al	P	S	Ca	Ti	V	Mn	Fe	Cu	K	As
		pg/m3	ug/m3	pg/m3	pg/m3	ng/m3	pg/m3	pg/m3	pg/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3	pg/m3	pg/m3	ng/m3	ng/m3	ng/m3	ng/m3	pg/m3
BAR-31-CYQ,CYT	09/09/00	5.3	3.5	183.8	122.3	1.0	30.6	60.9	2312.2	23.3	65.7	6.9	244.1	68.5	831.7	116.0	1.9	40.1	2.5	63.7	470.7
BAR-32-CYQ,CYT	09/15/00	4.1	30.9	823.4	126.9	3.7	144.0	225.1	1839.7	102.7	181.4	17.1	801.0	419.2	2805.7	357.5	7.7	126.9	1.0	108.9	386.3
BAR-33-CYQ,CYT	09/21/00	0.7	BDL	276.8	87.1	0.7	20.1	43.1	209.9	13.2	52.0	7.0	62.0	7.1	595.6	85.7	0.7	7.2	BDL	27.4	27.2
BAR-34-CYQ,CYT	09/27/00	2.0	3.2	39.9	60.6	0.5	16.3	23.7	302.1	0.6	41.4	5.1	381.3	BDL	272.9	58.2	0.3	BDL	0.3	29.7	223.2
BAR-35-CYQ,CYT	10/09/00	2.0	2.7	200.6	47.3	0.3	9.4	12.2	234.5	10.8	7.4	2.9	120.5	31.3	207.3	25.2	BDL	3.2	0.8	10.5	55.0
BAR-36-CYQ,CYT	10/18/00	5.2	3.3	282.4	31.8	1.7	12.6	9.3	257.6	3.6	8.0	2.3	68.1	29.0	281.6	30.2	BDL	2.4	BDL	12.7	62.8
BAR-37-CYQ,CYT	10/21/00	4.3	BDL	57.0	67.4	0.2	7.8	9.5	1362.8	1.9	3.8	1.9	333.4	9.3	248.1	213.2	0.4	10.0	BDL	12.5	302.2
BAR-38-CYQ,CYT	10/27/00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BAR-39-CYQ,CYT	11/02/00	2.4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BAR-40-CYQ,CYT	11/08/00	1.6	10.1	194.4	62.3	0.3	15.7	21.7	619.3	14.8	4.8	2.7	615.8	29.9	217.1	110.2	0.4	8.1	BDL	16.3	138.6
BAR-41-CYQ,CYT	11/26/00	5.5	1.9	169.9	23.6	0.8	7.7	8.4	381.7	12.8	5.5	5.5	64.2	25.5	217.6	23.3	0.3	6.2	BDL	8.3	46.4
BAR-42-CYQ,CYT	12/02/00	0.7	1.9	70.9	35.8	2.9	2.9	4.5	274.3	1.6	4.3	1.2	62.7	3.1	68.5	25.8	BDL	BDL	BDL	9.8	42.8
BAR-43-CYQ,CYT	12/08/00	0.1	BDL	20.7	11.0	0.2	BDL	BDL	290.7	1.3	1.8	3.4	BDL	1.5	32.0	BDL	BDL	BDL	BDL	1.3	3.7
BAR-44-CYQ,CYT	12/14/00	0.2	BDL	2.8	9.7	0.3	BDL	BDL	30.9	1.4	2.0	1.9	BDL	BDL	18.1	4.3	BDL	BDL	BDL	4.1	12.9
BAR-45-CYQ,CYT	12/20/00	0.6	3.5	473.5	60.9	0.2	6.4	9.8	337.3	44.1	3.7	3.1	235.8	80.9	153.2	17.5	0.2	14.2	0.3	14.1	29.6
BAR-46-CYQ,CYT	12/26/00	4.7	17.3	126.8	67.1	0.5	17.5	23.3	1393.9	6.3	12.4	3.8	633.6	20.7	396.3	98.0	0.8	18.6	0.3	19.6	245.7
BAR-47-CYQ,CYT	01/25/01	0.5	3.1	69.5	29.1	0.3	5.1	7.9	135.6	2.2	5.5	3.3	172.5	5.3	139.9	36.0	0.2	3.4	0.2	10.7	33.6
BAR-48-CYQ,CYT	01/31/01	5.9	8.4	109.7	63.7	0.4	9.5	14.3	759.2	5.4	8.2	2.8	480.7	15.5	265.3	160.1	0.6	16.7	0.5	15.2	197.7
BAR-49-CYQ,CYT	02/06/01	*	1.5	25.7	26.2	0.1	BDL	BDL	142.8	2.6	2.8	1.7	74.2	4.9	109.1	23.8	BDL	2.8	BDL	6.5	BDL
BAR-50-CYQ,CYT	02/18/01	9.4	4.3	85.4	33.6	0.3	9.9	13.1	303.7	4.2	7.9	3.6	129.1	11.8	268.3	52.2	0.2	7.1	0.6	9.3	41.2
BAR-51-CYQ,CYT	02/24/01	4.8	6.4	363.6	47.4	0.1	6.7	7.3	432.3	36.2	2.4	5.5	382.8	91.5	80.7	75.3	0.2	5.1	BDL	18.7	66.6

Table B1. EPA Region 5: PM10 Emissions by County

RANK*	STATE	PLANTS	PM10 (Tons Per Year)	COUNTY NAME
1	MN	55	15412	ST LOUIS CO
2	IN	101	10787	LAKE CO
3	IL	280	10569	COOK CO
4	IL	33	6447	MADISON CO
5	MN	8	4038	SHERBURNE CO
6	IN	27	3230	PORTER CO
7	IL	53	2730	WILL CO
8	MN	124	2514	HENNEPIN CO
9	MI	155	2511	WAYNE CO
10	MN	10	2458	ITASCA CO
11	WI	20	2423	BARRON CO
12	IN	133	2084	MARION CO
13	WI	22	2061	MARINETTE CO
14	IN	14	1862	WARRICK CO
15	MN	6	1746	BELTRAMI CO
16	MN	11	1722	CARLTON CO
17	IL	18	1669	TAZEWELL CO
18	IL	16	1667	MACON CO
19	IL	3	1500	RANDOLPH CO
20	IL	2	1376	BOND CO
21	IL	31	1327	LA SALLE CO
22	MI	11	1320	MARQUETTE CO
23	MI	7	1310	PRESQUE ISLE CO
24	IL	47	1299	PEORIA CO
25	IN	12	1257	JEFFERSON CO
215	MI	5	2	HOUGHTON CO
410	MI	1	0	BARAGA CO
34	MN	87	963	MOBILE SOURCES
47	MI	85	718	MOBILE SOURCES
277	WI	60	51	MOBILE SOURCES

* Out of 423 (420 Counties and 3 Estimates of Statewide Mobile Source Emissions)

New ource Review Facilities
&
Keweenaw Bay Indian Community
(19 NSR Facilities)



Loc_name	Identifier	Company_NA	Source_TYP	Address	Score	X	Y	Match_addr	SIDE	City	State	Zip	Found_In	Tribe	Phone	Country	On_Reserva	Match_Rate	Proximity
	1827	Besse Forest Products Inc	Lumber Manufacturer	802 MICHIGAN AVENUE, ROUT	84	-88.50538103	46.77929909	802 MICHIGAN AVE, BARAGA, MI, 49908	L	Baraga	MI	49946	yellopages.com	Keweenaw Bay Indian Community		US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1830	Homestead Graphics	Printing Operations	516 S Superior Ave	100	-88.49441830	46.77233833	516 S SUPERIOR AVE, BARAGA, MI, 49908	L	Baraga	MI	49908	yellopages.com	Keweenaw Bay Indian Community		US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1831	Disney's Seal Coating	Coating Operations	129 Main Ave	100	-88.48781727	46.78058512	129 MAIN AVE, BARAGA, MI, 49908	R	Baraga	MI	49908	yellopages.com	Keweenaw Bay Indian Community		US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1832	Peninsula Powder Coating	Coating Operations (Fabrics)	128 Hemlock St	100	-88.47912083	46.78907472	128 HEMLOCK ST, BARAGA, MI, 49908	L	Baraga	MI	49908	yellopages.com	Keweenaw Bay Indian Community	(906) 353-7234	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1833	Northern Painting & Coatings	Coating Operations	615 S Superior Ave	100	-88.49519171	46.77139404	615 S SUPERIOR AVE, BARAGA, MI, 49908	R	Baraga	MI	49908	yellopages.com	Keweenaw Bay Indian Community		US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1838	J&J Repair	Auto Repair	16549 Indian Cemetary Rd	49	-88.42474782	46.77931707	INDIAN CEMETERY		Lanse	MI	49946	yellopages.com	Keweenaw Bay Indian Community		US	On Reservation/Trust Land	Fair	Keweenaw Bay Indian Community
	1843	Laser North	Laser Cutting & CNC bending	442 N Superior Ave	100	-88.48323073	46.78419140	442 N SUPERIOR AVE, BARAGA, MI, 49908	L	Baraga	MI	49908	michiganbusiness	Keweenaw Bay Indian Community		US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1844	Bonnies	repellant & fertilizers	371 Cadeau Rd	53	-88.53660549	46.83008380	CADEAU		Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6841	US	On Reservation/Trust Land	Fair	Keweenaw Bay Indian Community
	1845	Lakeside Auto Truck	Auto Repair	802 1/2 US Highway	100	-88.49266462	46.77117821	802 USHY 41, BARAGA, MI, 49908	L	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6056	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1846	Baraga, Inc	metal	442 N Superior Ave	100	-88.48323073	46.78419140	442 N SUPERIOR AVE, BARAGA, MI, 49908	L	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6090	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1847	Massie Mfg, Inc	metal	445 N Superior Ave	100	-88.48311382	46.78420938	445 N SUPERIOR AVE, BARAGA, MI, 49908	R	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6381	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1848	Selkey Manufacturin	metal	1317 Lindblom Rd	65	-88.50931107	46.77194263	LINDBLOM RD		Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-7104	US	On Reservation/Trust Land	Fair	Keweenaw Bay Indian Community
	1849	Northern Oil 1 Inc	Petroleum Bulk	150 Us Ste 41	100	-88.48678305	46.77894835	150 USHY 41, BARAGA, MI, 49908	L	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6185	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1850	Xtreme Manufacturing	Forklifts&stuff	125 Mian Ave	93	-88.48781727	46.78045921	125 MAIN AVE, BARAGA, MI, 49908	R	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-8005	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1851	Baraga County Concrete Company	concrete	468 N Superior Ave	100	-88.48258322	46.78479394	468 N SUPERIOR AVE, BARAGA, MI, 49908	L	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6595	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1852	UP Plastics Inc	plastics	435 N Superior Ave	100	-88.48351851	46.78382267	435 N SUPERIOR AVE, BARAGA, MI, 49908	R	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6768	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1853	Olymic Steel	metal	16360 Ojibwa Indus Pk Rd	5	-88.50918517	46.81144985	49908		Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-8750	US	On Reservation/Trust Land	Poor	Keweenaw Bay Indian Community
	1855	Bay Auto Parts of Baraga Inc	Auto Repair	340 US Highway 41 N	89	-88.48094645	46.78419140	340 USHY 41, BARAGA, MI, 49908	L	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6685	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community
	1856	Bay Auto Parts	Auto Repair	346 U S 41 S	100	-88.48829391	46.77640327	346 USHY 41 S, BARAGA, MI, 49908	L	Baraga	MI	49908	manta.com	Keweenaw Bay Indian Community	(906) 353-6685	US	On Reservation/Trust Land	Good	Keweenaw Bay Indian Community